SYSTEM AND METHOD FOR MANAGING INPUT/OUTPUT REQUESTS USING A FAIRNESS THROTTLE

5 ABSTRACT

A system and method for providing a desired degree of fairness of access to data transfer resources by a plurality of command-initiating bus agents. A bus arbiter allocates general ownership of the bus to one of a plurality of bus agents, and a fairness module imposes a desired degree of fairness to the data transfer resources by mandating data transfer resource access to bus agents whose commands have been subjected to a retry response. The degree of fairness is controllable, in order to appropriately balance the desired throughput and data transfer resource allocation for a particular application.